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INFORMATION DISCLOSURE STATEMENT Patent Application Docket No. UF-311XC1 Serial No. 10/718,842

May 10, 2004

Margaret Efron, Patent Attorney

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

Applicant(s) :

Sartaj Kumar Sahni, Haibin Lu, Kun Suk Kim

Serial No.

10/718,842

2661

Filed

November 21, 2003

For -

Partitioning Methods for Dynamic Router Tables

Conf. No.

1937

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## <u>INFORMATION DISCLOSURE STATEMENT</u> <u>UNDER 37 CFR §§1.97 AND 1.98</u>

Sir:

In accordance with 37 CFR §1.56, the references listed on the attached form PTO/SB/08 are being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application. A copy of each cited reference is enclosed.

It is respectfully requested that the references cited on the attached form PTO/SB/08 be considered in the examination of the subject application and that their consideration be made of record.

: : )

The applicants respectfully assert that the substantive provisions of 37 CFR  $\S\S1.97$  and 1.98 are met by the foregoing statement.

Respectfully submitted,

Margaret H. Efron

Patent Attorney

Registration No. 47,545

Phone No.:

352-375-8100

Address:

2421 N.W. 41st Street, Suite A-1

Gainesville, FL 32606-6669

MHE/ue

Enclosure: Form PTO-1449

Copies of references cited



PTO/SB/08A (08-03)
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Substitute for for	m 1449A/PTO			Con	Complete if Known		
INICODMA	TION DISCL	00	UDE	Application Number	10/718,842		
	ATION DISCL ENT BY APP			Filing Date	November 21, 2003		
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				Examiner Name			
Sheet	1	of	4	Attorney Docket Number	UF-311XC1		

	U.S. PATENT DOCUMENTS								
Examiner Initials*	Cite No. 1	Document Number Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear				
_	U1	US- 4,251,861	02-17-1981	Mago	. All				
	U2	US- 4,833,468	05-23-1989	Larson et al.	· All				
	U3	US- 5,555,405	09-10-1996	Griesmer <i>er al.</i>	All				
	U4	US- 5,701,467	12-23-1997	Freeston	All				
	U5	US- 5,761,440	06-02-1998	De Marco et al.	All				
	U6	US- 5,787,430	07-28-1998	Doeringer et al.	All				
	U7	US- 5,909,440	06-01-1999	Ferguson <i>et al</i> .	All				
	U8	US- 6,018,524	01-25-2000	Turner et al.	All				
	U9	US- 6,021,131	02-01-2000	Even	All				
	U10	US- 6,041,053	03-21-2000	Douceur et al.	All				

	FOREIGN PATENT DOCUMENTS									
		Foreign Patent Document	Publication Date	Name of Patentee or	Pages, Columns, Lines,					
Examiner Initials*	Cite No. <sup>1</sup>	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>				
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Substitute for for	m 1449A/PTO			Complete if Known		
	TION DISCL	00	UDE .	Application Number	10/718,842	
	ATION DISCLE ENT BY APPL	-	_	Filing Date	November 21, 2003	
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			U.S. PATENT DO	OCUMENTS	
Examiner Initials*	Cite No. 1	Document Number Number - Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	U11 <sup>*</sup>	US- 6,061,712	05-09-2000	Tzeng	All
	U12	US- 6,092,072	07-18-2000	Guha <i>et al.</i>	.: All
	U13	US- 6,104,701	08-15-2000	Avargues et al.	, Åll
	U14	US- 6,157,955	12-05-2000	Narad et al.	All .
	U15	US- 6,212,184	04-03-2001	Venkatachary et al.	e. All
•	U16	US- 6,266,706	07-24-2001	Brodnik <i>et al</i> .	All
	U17	US- 6,289,013	09-11-2001	Lakshman <i>et al</i> .	ÅII
·	U18	US- 6,335,932	01-01-2002	Kadambi <i>et al.</i>	All
	U19	US- 6,341,130	01-22-2002	Lakshman <i>et al.</i>	All
	U20	US- 6,522,632	02-18-2003	Waters et al.	All
	U21	US- 6,563,823	05-13-2003	Pyrzygienda <i>et al.</i>	All
	U22	US-2002/0009076	01-24-2002	Engbersen et al.	All
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	RMATION D		OSLIDE	Application Number	10/718,842
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(use as many sheets as necessary)			:33a1y)	Examiner Name	
Sheet	3	of	4	Attorney Docket Number	UF-311XC1

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	R1	Afek, Y. et al. (Dec. 14, 1999) "Routing with a Clue" ACM SIGCOMM. pp. 203-214, (enclosed copy pages numbered 0-23).	
•	R2	BERG, M. (1995) "Two- and Three-dimensional Point Location in Rectangular Sub-divisions" <i>Journal of Algorithms</i> . Vol. 18, No. 2, pp. 256-277.	
	R3	CHANDRANMENON, G. and VARGHESE, G. (1996) "Trading Packet Headers for Packet Processing" <i>IEEE Transactions on Networking</i> . Vol. 4, No. 2, pp. 141-152 (enclosed copy pages numbered 1-13).	
	R4	CHEUNG and MCCANNE. (1999) "Optimal Routing Table Design for IP Address Lookups under Memory Constraints," <i>IEEE INFOCOM</i> . pp. 1437-1444.	
	R5	DEGERMARK, M. et al. "Small Forwarding Tables for Fast Routing Lookups" ACM SIGCOMM Proceedings of the ACM SIGCOMM '97 Conference on Applications, technologies, architectures, and protocols for computer communication. pp. 3-14.	
	R6	DOERINGER, W. et al. (1996) "Routing on Longest-matching Prefixes" IEEE/ACM Transactions on Networking. Vol. 4, No. 1, pp. 86-97.	
	R7	ERGUN, F. et al. (2001) "A Dynamic Lookup Scheme for Bursty Access Patterns" IEEE INFOCOM. pp. 1-10.	
	R8	GUPTA, P. and N. MCKEOWN. (2000) "Dynamic Algorithms with Worst-case Performance for Packet Classification." <i>IFIP Networking</i> . pp. 528-539	
	R9	HARI, A. et al. (2000) "Detecting and Resolving Packet Filter Conflicts" IEEE INFOCOM. pp. 1203-1212.	
	R10	LAMPSON, B. et al. (1998) "IP Lookup using Multi-way and Multicolumn Search" IEEE INFOCOM Transactions on Networking. Vol. 7, No. 3, pp.324-334.	
	R11	MACIAN, C. and R. FINTHAMMER. (2001) "An Evaluation to the Key Design Criteria to Achieve High Update Rates in Packet Classifiers" <i>IEEE Network</i> . Nov/Dec, pp. 24-29 (enclosed copy pages numbered 1-10).	
	R12	MCAULEY, A. and P. FRANCIS.(1993) "Fast Routing Table Lookups Using CAMs" <i>IEEE INFOCOM</i> . Vol. 3 Mar./Apr., pp. 1382-1391.	
	R13	MCCREIGHT, E. (1985). "Priority Search Trees" SIAM Jr. on Computing. Vol. 14, No. 1, pp. 257-276.	

Examiner	Date
Signature	Considered
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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Complete if Known **Application Number** 10/718,842 **Filing Date** November 21, 2003 **First Named Inventor** Sartaj Kumar Sahni **Group Art Unit** 2661 **Examiner Name** 

(use as many sheets as necessary)

UF-311XC1 Sheet of 4 **Attorney Docket Number** 

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No. 1	Include name of the author (in CAPITAL LETTERS), title of the article, (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
	R14	NEWMAN, P. et al. (Jan. 1997) "IP Switching and Gigabit Routers" IEEE Broadband Communications Magizine. Vol. 35, pp. 64-69 (enclosed copy pages numbered 1-8).	
!	R15	S. NILSSON and G. KARLSSON (1998) "Fast Address Look-up for Internet Routers" <i>Proceedings of IEEE Broadband Communications</i> . (enclosed copy pages numbered 9-18).	
	R16	RUIZ-SANCHEZ, M. et al. (2001) "Survey and Taxonomy of IP Address Lookup Algorithms" IEEE Network, Mar./Apr., Vol. 15, No. 2, pp. 8-23.	
_	R17	S. SAHNI and K. KIM. "Data Structures of IP Lookup with Bursty Access Patterns", www.cise.ufl.edu/~sahni. (enclosed copy pages numbered 1-5).	
	R18	S. SAHNI and K. KIM. (2001) "Efficient Construction of Fixed-Stride Multibit Tries for IP Lookup" <i>Proceedings 8<sup>th</sup> IEEE Workshop on Future Trends of Distributed Computing Systems</i> . pp. 178-184 (enclosed copy pages numbered 1-7).	
	R19	S. SAHNI and K. KIM. (2002) "Efficient Construction of Variable-Stride Multibit Tries for IP Lookup." <i>Proceedings IEEE Symposium on Applications and the Internet (SAINT)</i> . pp. 220-229 (enclosed copy pages numbered 1-8).	
	R20	S. SAHNI and K. KIM. (2002) "O(log n) Dynamic Packet Routing." 7 <sup>th</sup> IEEE Symposium on computers and communications.	
	R21	S. SAHNI and K. KIM, H. Lu. (May 2002) "Data structures for one-dimensional packet classification using most-specific-rule matching." International Symposium on Parallel Architectures, Algorithms, and Networks (ISPAN). pp. 3-14 (enclosed copy pages numbered 1-12).	
-	R22	K. SKLOWER. (1991) "A tree-based routing table for Berkeley Unix." Proceedings of 1991 Winter USENIX Conference. pp. 93-99 (enclosed copy pages numbered 1-4).	
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	R25	WALDVOGEL, MARCEL et al. (1997) "Scalable High Speed IP Routing Lookups." Proceedings of the ACM SIGCOMM '91 Conference on Applications, technologies, architectures, and protocols for computer communication. pages 25-36 (enclosed copy pages numbered 1-12).	
	R26		

Examiner	Date	
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